



# Lake Erie Harmful Algal Bloom Bulletin

28 June, 2018, Bulletin 02

## Analysis

Cyanobacteria is present in Lake Erie at low concentrations. *Microcystis* is present in the Maumee Bay area of western basin. Imagery from 6/26 indicates detectable concentrations near North Maumee Bay and along the Ohio coast, east of Maumee Bay State Park. Measured toxin concentrations are below recreational thresholds throughout the bloom extent. The persistent cyanobacteria bloom in Sandusky Bay continues. No other blooms are present in Lake Erie.

## Forecasts

Forecast winds (3-9 kn) Thursday through Friday will increase the potential for scum formation. Forecast winds (9-13 kn) Saturday through Monday (6/30- 7/2) will increase the potential for mixing of *Microcystis*. Forecast winds will promote easterly transport of *Microcystis* today through Monday (6/28-7/2). –Ludema, Keeney

## Additional Resources

To find a safe place for recreation, visit the Ohio DOH "BeachGuard" site: <http://publicapps.odh.ohio.gov/beachguardpublic/>

Ohio EPA's site on harmful algal blooms: <http://epa.ohio.gov/HAB-Algae>

NOAA's GLERL provides additional HAB data here: [http://www.glerl.noaa.gov/res/HABs\\_and\\_Hypoxia](http://www.glerl.noaa.gov/res/HABs_and_Hypoxia)

The images below are "GeoPDF". Please visit <https://go.usa.gov/xReTC> for instructions on viewing longitude and latitude.

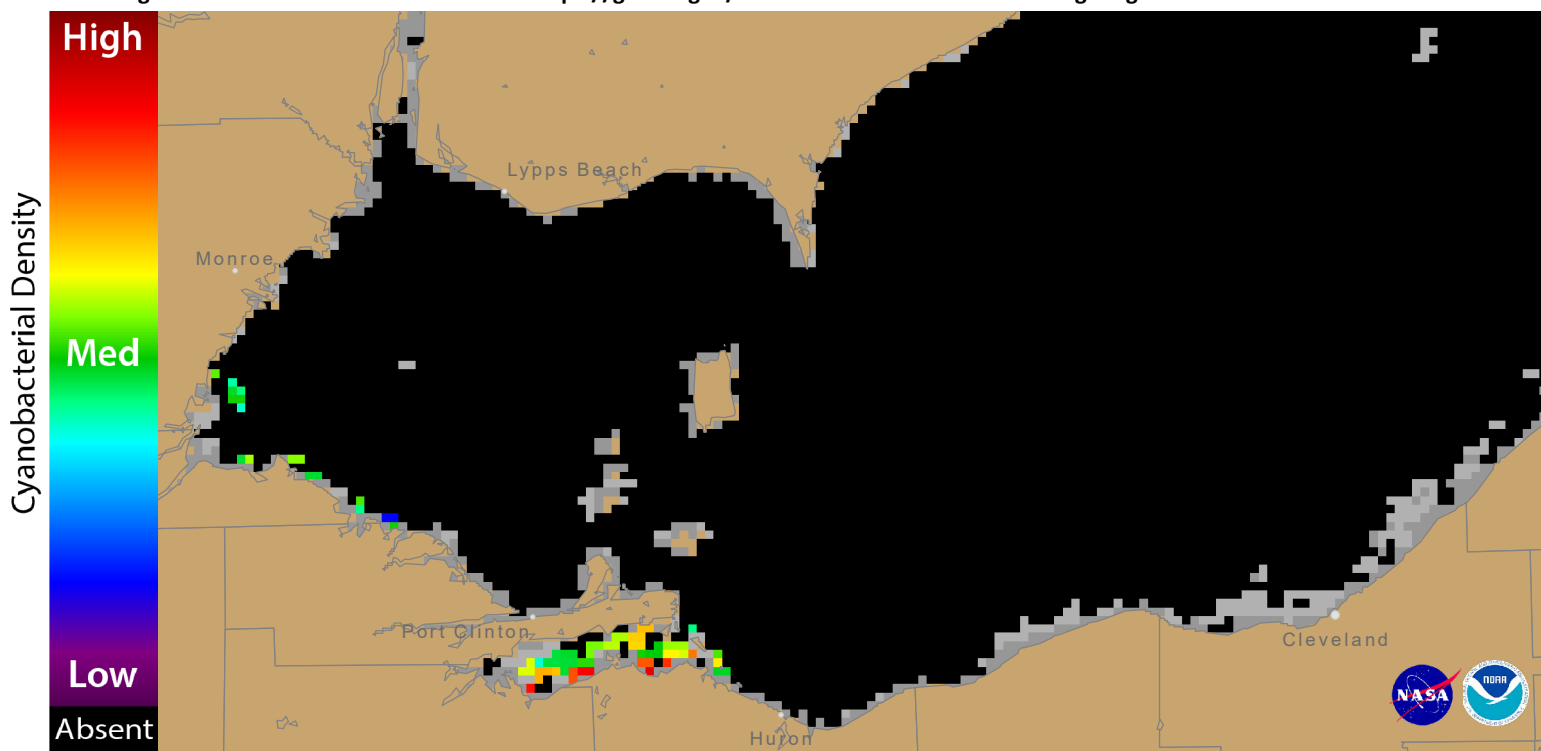


Figure 1. Cyanobacterial Index from NASA MODIS-Aqua data collected 26 June, 2018 at 14:08 EST. Grey indicates clouds or missing data. The estimated threshold for cyanobacteria detection is 20,000 cells/mL.

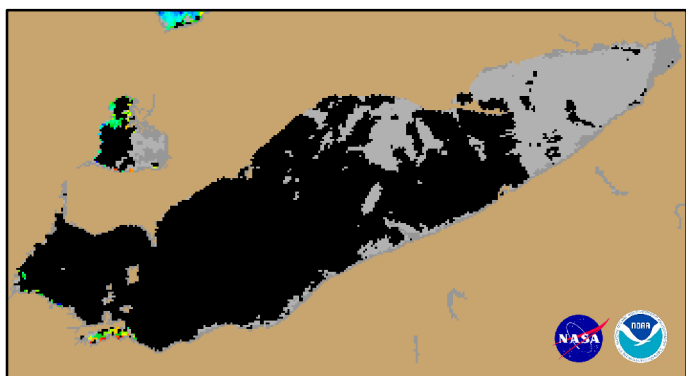
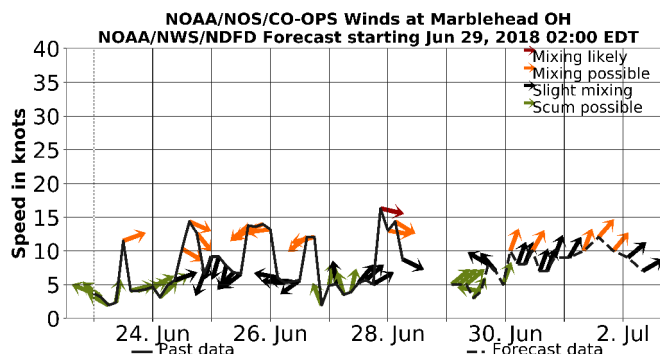


Figure 2. Cyanobacterial Index from NASA MODIS-Aqua data collected 26 June, 2018 at 14:08.



Wind speed and direction from Marblehead, OH. Blooms mix through the water column at wind speeds greater than 15 knots (or 7.7 m/s).

For more information and to subscribe to this bulletin, go to: <https://tidesandcurrents.noaa.gov/hab/lakeerie.html>

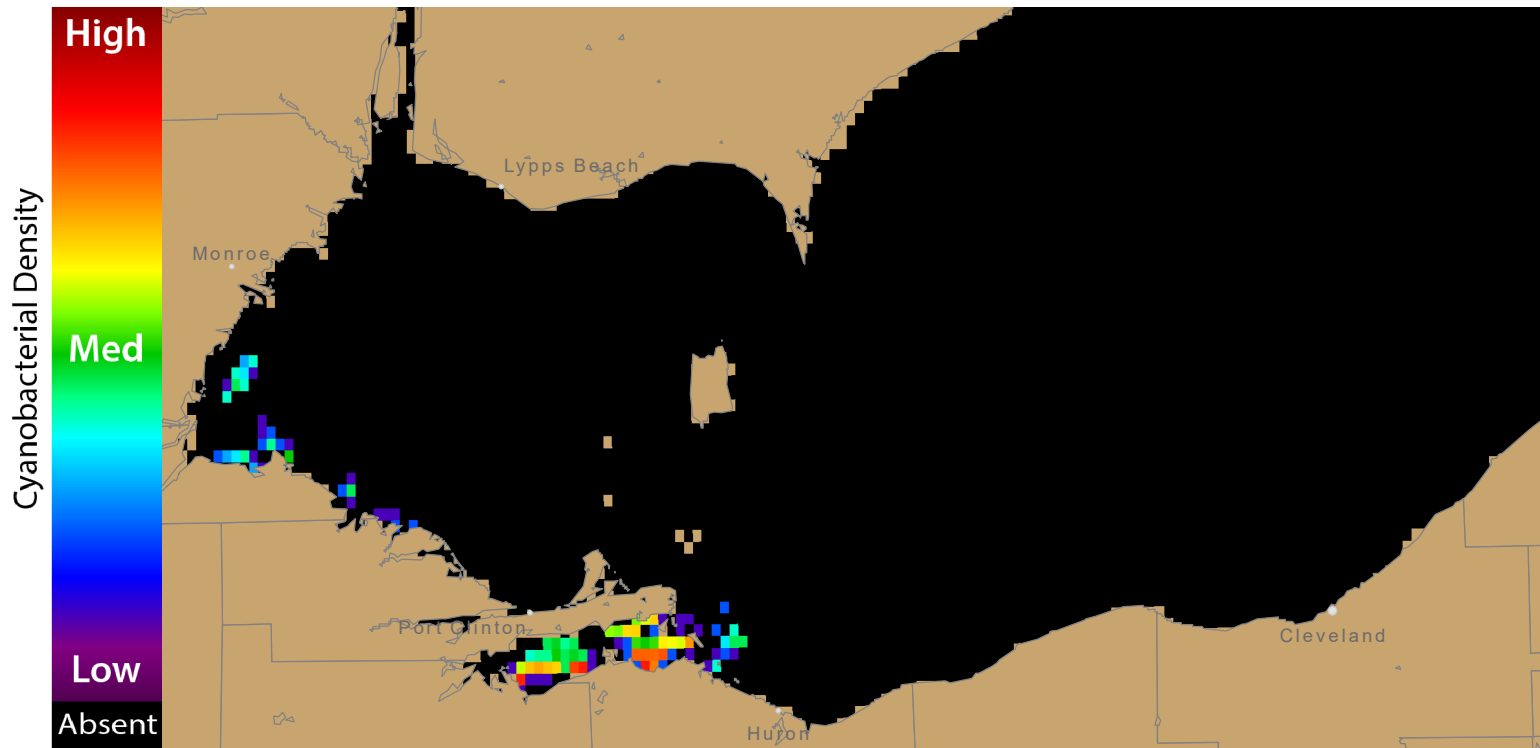


Figure 3. Nowcast position of bloom for 28 June, 2018 using GLFS modelled currents to move the bloom from the 26 June, 2018 image.

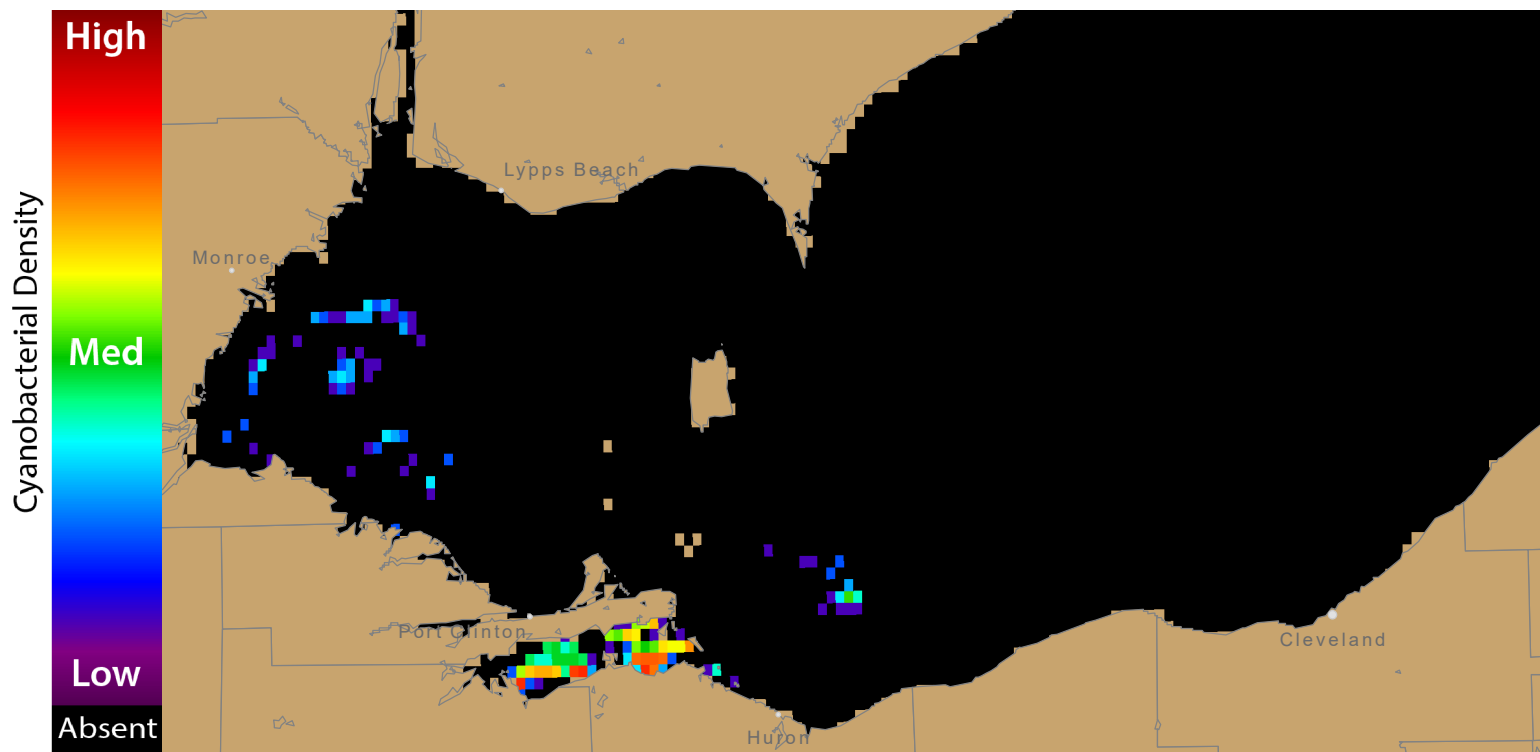
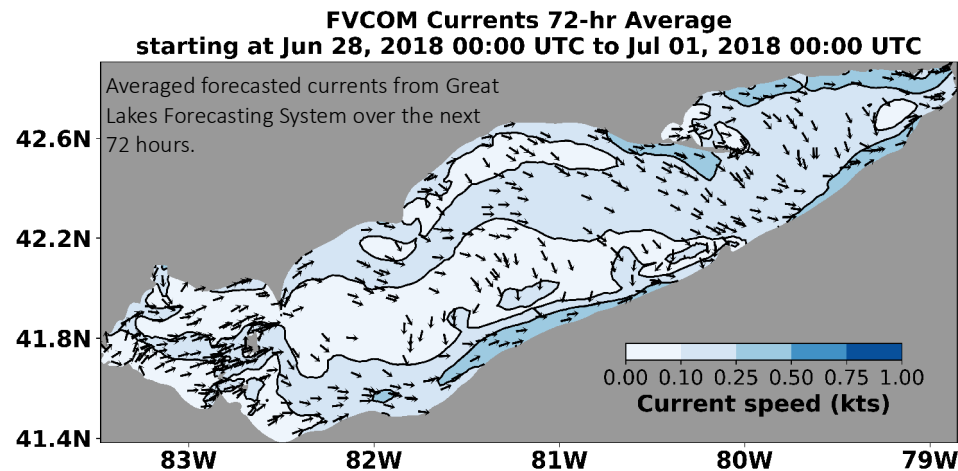


Figure 4. Forecast position of bloom for 01 July, 2018 using GLFS modelled currents to move the bloom from the 26 June, 2018 image.



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